STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DESIGN

CONFERENCE REPORT

PROJECT: PETERBOROUGH

X-A000(890)

15698

NH 101 / NH 123 / Old Street Road safety improvements study

DATE OF CONFERENCE: June 29, 2010

LOCATION OF CONFERENCE: Peterborough Town Hall

ATTENDED BY: NHDOT Town of Peterborough

C. Green Barbara Miller – Chair of Select Board

M. Dugas Liz Thomas – Select Board John Kallfelz Joe Byk – Select Board

Pam Brenner – Town Administrator

Approximately 15 residents

SUBJECT: Public Informational Meeting

NOTES ON CONFERENCE:

C. Green explained that this intersection had come to the Department's attention through studies undertaken as part of the Highway Safety Improvement Program (HSIP). He explained that the current Federal highway funding law, known by its acronym of SAFETEA-LU, created the HSIP to identify highway safety issues and provide for modest safety improvements that would achieve a significant reduction in traffic fatalities and serious injuries. New Hampshire receives \$5.5 million per year to implement modest safety improvements in locations where crash data indicates safety deficiencies. He stressed that the HSIP is intended to be data driven; locations identified to use these funds must have a crash history that demonstrates there is a safety need.

This particular intersection was identified through development of the NHDOT's annual "5% Report" identifying the State's most severe safety needs. The NHDOT identified locations with the highest crash rates for roadway segments and highest number of crashes for intersections for each functional class of roadway. From the "5% Report" further analysis of the locations was used to narrow the number of locations, of which this intersection was one of approximately 35 selected for further study. He noted that Southwest Regional Planning Commission had recently performed a road safety audit of this portion of NH 101. He explained that attendees at the

September 1, 2009 meeting had noted several key observations and safety concerns regarding the existing intersection, including the following:

- Westbound sight distance on NH 101 is limited by the crest that is just east of the intersection,
- Sight distance from NH 123 is limited to both the left and the right by terrain and overgrown vegetation,
- Sight distance looking left from Old Street Road is limited by the roadside terrain and stone wall,
- Westbound vehicle speeds typically exceed the 40 mph posted speed limit, and
- The eastbound passing lane that is west of the intersection encourages higher speeds for eastbound traffic.

Attendees had also offered suggestions to improve the intersection safety such as clearing vegetation to improve sight lines, enlarging speed limit or intersection signs or supplementing them with flashing beacons or "driver feedback" capability, or reducing the posted speed limit on NH 101. None were in favor of adding control to the NH 101 approaches to the intersection such as stop signs, signals, or a roundabout.

M. Dugas explained the two alternatives that had been developed. Each of these alternatives would also incorporate improvements to the existing signs. The first alternative would install raised (curbed) median islands on NH 101 adjacent to the intersection to calm traffic speeds along NH 101 and make the intersection more conspicuous, as is proposed along NH 101 in Dublin. However, it was determined that the islands would pose a hazard to NH 101 westbound traffic because the existing crest would limit the islands' visibility. Also, the islands would be an obstacle to snow plowing and would make truck turns from NH 123 and Old Street Road onto NH 101 difficult. This alternative is not feasible.

The second alternative would improve the sight lines at the intersection by adjusting the position of the lanes on NH 101 and improving the roadside grading. The proposed improvement would widen NH 101 east of NH 123 by approximately four feet to the south. This additional width would allow the travel lanes to be shifted south and a 10' wide shoulder to be provided along the north side of NH 101. The wide shoulder will permit vehicles exiting Old Street Road to look left in front of the existing stone wall without encroaching on the eastbound travel lane. The resulting sight distance would be adequate for a speed along NH 101 of 50 mph. On the south side of NH 101 the roadside would be graded to provide a similar 50 mph sight line looking right from NH 123. The roadside grading would impact a stone wall, which could be relocated, and would require the acquisition of slope easements on parcel 1 (Pelletier).

Questions and Comments

• Ms. Anne Pelletier expressed concern with the proposed impacts upon her property and asked that the Department meet with her on site to review the proposed improvements. C. Green agreed to her request. (Subsequently a survey was performed to lay out the proposed concept along with staking of the grading impacts to Ms. Pelletier's property. A meeting has been scheduled for August 5 to review the impacts with Ms. Pelletier.)

- Mr. C. Gregg explained that in addition to the crest on NH 101 east of the intersection, the horizontal curve just east of the crest also limits intersection sight distance. He asked that the Department investigate improvements further east beyond the currently proposed easterly limit of work.
- An attendee explained that overgrown vegetation and roadside ledge on the south side of NH 101 west of NH 123 also limit intersection sight distance. C.
 Green answered that the Department would investigate this area for improvements.
- An attendee suggested that the proposed median islands, which he agreed
 were not feasible at the intersection, be located on a flatter section of NH 101
 further east of the intersection to slow westbound traffic as it descends the
 grade. C. Green responded that the Department would investigate whether a
 suitable location is available.
- J.B. Mack from the SWRPC suggested highway advisory signing for drivers to turn on their headlights be added. C. Green noted that this was a treatment intended more for a corridor safety issue and not for a specific location.

Submitted by:

Michael J. Dugas, P.E. Chief of Preliminary Design

MJD/mjd

cc: W. Cass, C. Green, W. Lambert, D. Graham – District 4 S:\((TOWNS)\)\(Peterborough\)\(15698\)\(Conference Reports\)\(062910.DOC